

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061930

Luminaire Tested: S125RDR-H1270D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061930
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1270D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

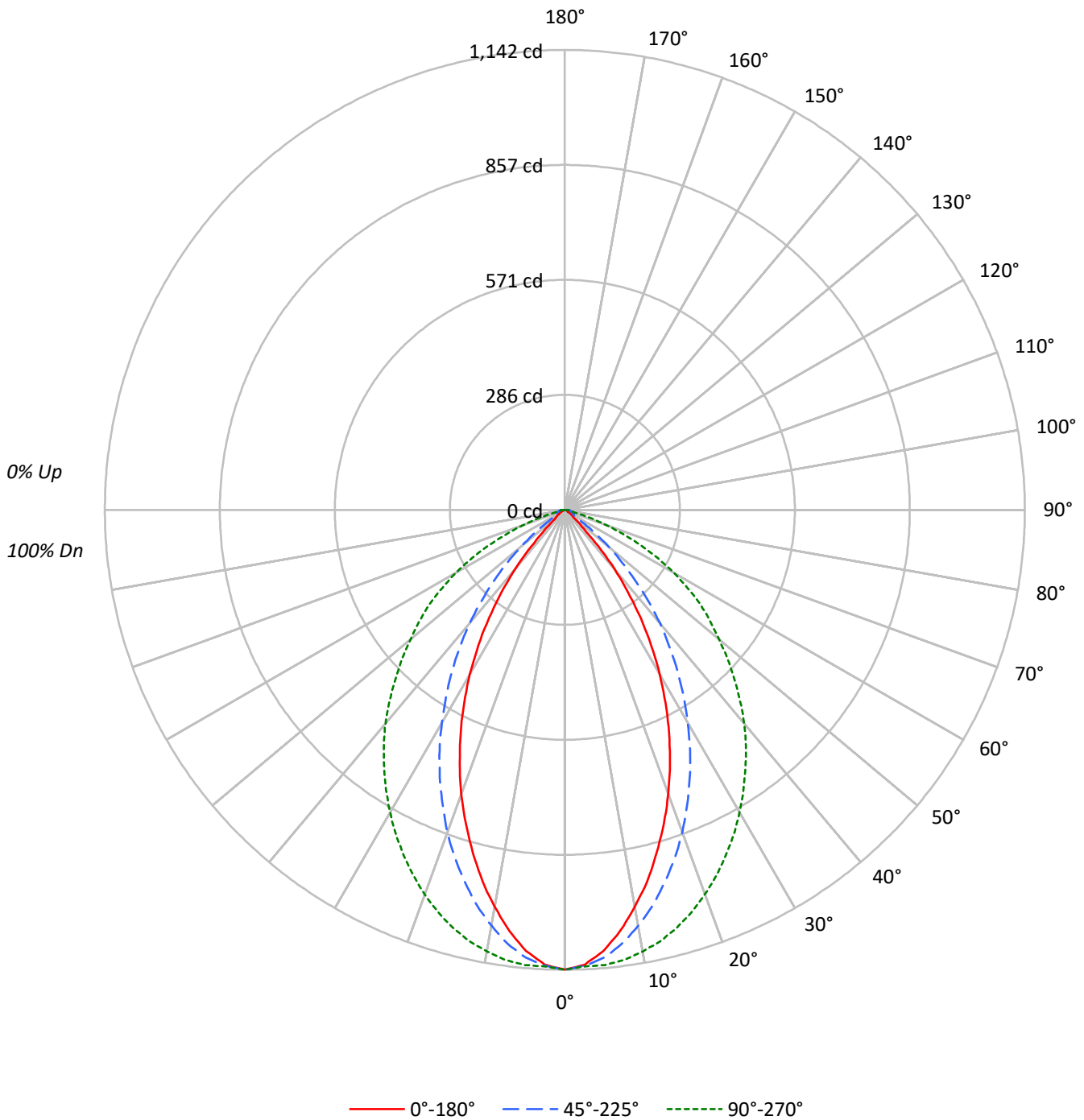
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1468.3 lumens
Efficiency: N/A
Efficacy: 40.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7860	7860	7860
5°	7599	7715	7842
10°	6998	7333	7785
15°	6283	6825	7656
20°	5501	6243	7448
25°	4646	5575	7188
30°	3745	4851	6897
35°	2754	4089	6570
40°	1719	3299	6230
45°	644	2409	5791
50°	301	1506	5346
55°	220	624	4944
60°	154	329	4278
65°	91	389	3390
70°	85	453	2152
75°	112	450	673
80°	167	559	504
85°	332	885	664

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5791 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	7.1
10°-20°	271.0	18.5
20°-30°	345.3	23.5
30°-40°	321.3	21.9
40°-50°	220.2	15.0
50°-60°	121.2	8.3
60°-70°	57.4	3.9
70°-80°	18.0	1.2
80°-90°	9.2	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	721.0	49.1
0°-40°	1042.3	71.0
0°-60°	1383.7	94.2
0°-90°	1468.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1468.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1100	1114	1116	1125	1135	102
15°	882	910	958	1029	1074	246
25°	612	650	734	852	946	279
35°	328	374	486	647	782	203
45°	66	111	247	439	595	63
55°	18	21	52	245	412	17
65°	6	7	24	90	208	6
75°	4	7	17	18	25	4
85°	4	10	11	10	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1141.6	1141.6	1141.6	1141.6	1141.6
2.5°	1130.4	1141.6	1133.2	1133.2	1134.6
5°	1099.5	1113.5	1116.3	1124.8	1134.6
7.5°	1054.5	1072.7	1086.8	1110.7	1127.6
10°	1001.0	1023.5	1048.8	1088.2	1113.5
12.5°	944.8	968.7	1006.7	1061.5	1096.6
15°	881.5	909.7	957.5	1029.2	1074.1
17.5°	816.9	847.8	906.8	991.2	1047.4
20°	750.8	783.1	852.0	946.2	1016.5
22.5°	681.9	717.0	793.0	899.8	982.8
25°	611.6	649.6	733.9	852.0	946.2
27.5°	541.3	580.7	673.5	802.8	908.2
30°	471.0	511.8	610.2	752.2	867.5
32.5°	399.3	444.3	548.3	701.6	825.3
35°	327.6	374.0	486.5	646.7	781.7
37.5°	257.3	305.1	426.0	594.7	738.1
40°	191.2	239.0	367.0	542.7	693.1
42.5°	123.7	174.3	305.1	489.3	643.9
45°	66.1	111.1	247.4	438.7	594.7
47.5°	35.1	59.1	192.6	388.0	548.3
50°	28.1	32.3	140.6	337.4	499.1
52.5°	22.5	25.3	90.0	285.4	455.5
55°	18.3	21.1	52.0	244.6	411.9
57.5°	14.1	16.9	29.5	203.9	361.3
60°	11.2	12.7	23.9	163.1	310.7
62.5°	7.0	9.8	23.9	126.5	260.1
65°	5.6	7.0	23.9	90.0	208.1
67.5°	5.6	5.6	23.9	59.1	156.1
70°	4.2	4.2	22.5	38.0	106.9
72.5°	4.2	4.2	19.7	25.3	61.9
75°	4.2	7.0	16.9	18.3	25.3
77.5°	4.2	11.2	15.5	15.5	14.1
80°	4.2	11.2	14.1	12.7	12.7
82.5°	4.2	11.2	11.2	11.2	9.8
85°	4.2	9.8	11.2	9.8	8.4
87.5°	4.2	9.8	9.8	9.8	5.6
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	16.21	17.49	16.57	17.81	18.12
	3H	0.00	0.00	0.00	0.00	0.02	17.00	18.13	17.38	18.46	18.83
	4H	0.00	0.00	0.00	0.08	0.47	17.02	18.08	17.43	18.43	18.82
	6H	0.00	0.86	0.31	1.23	1.63	16.98	17.95	17.39	18.32	18.72
	8H	0.56	1.48	0.99	1.87	2.28	16.96	17.88	17.39	18.27	18.67
	12H	1.31	2.19	1.74	2.57	3.00	16.94	17.82	17.37	18.20	18.63
4H	2H	0.00	1.05	0.40	1.41	1.79	15.99	17.05	16.40	17.40	17.79
	3H	0.86	1.73	1.28	2.13	2.53	16.82	17.68	17.23	18.09	18.49
	4H	1.46	2.23	1.89	2.65	3.09	16.86	17.63	17.29	18.05	18.49
	6H	2.94	3.61	3.41	4.05	4.52	16.84	17.51	17.31	17.95	18.42
	8H	3.68	4.30	4.15	4.75	5.22	16.83	17.45	17.30	17.89	18.37
	12H	4.42	4.97	4.91	5.45	5.93	16.83	17.37	17.32	17.86	18.33
8H	4H	3.50	4.12	3.97	4.57	5.04	16.74	17.36	17.21	17.81	18.28
	6H	5.24	5.74	5.74	6.24	6.72	16.74	17.25	17.25	17.75	18.23
	8H	6.18	6.64	6.71	7.15	7.65	16.75	17.20	17.27	17.72	18.21
	12H	7.11	7.52	7.63	8.01	8.58	16.79	17.20	17.31	17.69	18.26
12H	4H	3.81	4.35	4.29	4.84	5.31	16.70	17.25	17.19	17.73	18.20
	6H	5.70	6.15	6.22	6.67	7.16	16.70	17.15	17.22	17.67	18.16
	8H	6.82	7.22	7.34	7.72	8.29	16.74	17.14	17.25	17.63	18.21